Western blot analysis of PD-1 in THP-1 cell lysate with PD-1 antibody at 1 ug/mL in the (A) absence and (B) presence of blocking peptide.

Immunofluorescence of PD-1 in PD-1-transfected HEK293 cells with PD-1 antibody at 20 ug/ml.

Green: PD-1 Antibody (4067)
Blue: DAPI staining

Immunocytochemistry of PD-1 in PD-1-transfected HEK293 cells with PD-1 antibody at 10 ug/ml.

Immunohistochemistry of PD-1 in human brain tissue with PD-1 antibody at 5 ug/mL.

**PD-1 Antibody**

**CATALOG NUMBER:** 4067

**Specifications**

**SPECIES REACTIVITY:** Human, Mouse, Rat

**TESTED APPLICATIONS:** ELISA, ICC, IF, IHC-P, WB

**APPLICATIONS:** PD-1 antibody can be used for detection of PD-1 by Western blot at 1 ug/mL. Antibody can also be used for immunohistochemistry starting at 5 ug/mL and immunocytochemistry at 10 ug/mL. For immunofluorescence start at 10 ug/mL.

Antibody validated: Western Blot in human samples; Immunohistochemistry in human samples; Immunocytochemistry in human samples and Immunofluorescence in human samples. All other applications and species not yet tested.

**USER NOTE:** Optimal dilutions for each application to be determined by the researcher.

**POSITIVE CONTROL:**

1) Cat. No. 1208 - THP-1 Cell Lysate
2) Cat. No. 10-301 - Human Brain Tissue Slide

**PREDICTED MOLECULAR WEIGHT:** Predicted: 32 kDa

**IMMUNOGEN:** PD-1 antibody was raised against a 16 amino acid synthetic peptide from near the center of human PD-1.

**Observed:** 43 kDa
The immunogen is located within amino acids 120 - 170 of PD-1.

**HOST SPECIES:** Rabbit

**Properties**

- **PURIFICATION:** PD-1 Antibody is affinity chromatography purified via peptide column.
- **PHYSICAL STATE:** Liquid
- **BUFFER:** PD-1 Antibody is supplied in PBS containing 0.02% sodium azide.
- **CONCENTRATION:** 1 mg/mL
- **STORAGE CONDITIONS:** PD-1 antibody can be stored at 4˚C for three months and -20˚C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
- **CLONALITY:** Polyclonal
- **ISOTYPE:** IgG
- **CONJUGATE:** Unconjugated

**Additional Info**

- **ALTERNATE NAMES:** PD-1 Antibody: PD1, PD-1, CD279, SLEB2, hPD-1, hPD-I, hSLE1, PD1, Programmed cell death protein 1, Protein PD-1
- **ACCESSION NO.:** Q15116
- **PROTEIN GI NO.:** 145559515
- **OFFICIAL SYMBOL:** PDCD1
- **GENE ID:** 5133

**Background**

**BACKGROUND:** PD-1 Antibody: Cell-mediated immune responses are initiated by T lymphocytes that are themselves stimulated by cognate peptides bound to MHC molecules on antigen-presenting cells (APC). T-cell activation is generally self-limited as activated T cells express receptors such as PD-1 (also known as PDCD-1) that mediate inhibitory signals from the APC. PD-1 can bind two different but related ligands, PDL-1 and PDL-2. Upon binding to either of these ligands, signals generated by PD-1 inhibit the activation of the immune response in the absence of “danger signals” such as LPS or other molecules associated with bacteria or other pathogens. Evidence for this is seen in PD1-null mice who exhibit hyperactivated immune systems and autoimmune diseases.

**REFERENCES:**


**FOR RESEARCH USE ONLY**

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